# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 09/683,238 | 12/05/2001 | James G. Shanahan | D/A1320 | 8310 |

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| EXAMINER |
|---|
| RIES, LAURIE ANNE |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2176 | |

DATE MAILED: 01/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 09/683,238 | SHANAHAN ET AL. |
| | Examiner | Art Unit |
| | Laurie Ries | 2176 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>08 November 2005</u>.

2a)☒ This action is **FINAL**.      2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) <u>1-6,8-14,16-18 and 21-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-6,8-14,16-18 and 21-24</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>14 April 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

1.     This action is responsive to communications:  Amendment, filed 8 November

2005, to the original application, filed 5 December 2001.

2.     Claims 1-3, 11, and 21-22 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Horowitz (U.S. Patent 6,122,647), hereafter referred to as "Horowitz

'647", in view of Horowitz (U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz

'987", and Mockus ("A Web-Based Approach to Interactive Visualization in Context"),

hereafter referred to as "Mockus".

3.     Claims 4-6 and 12-14 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Horowitz (U.S. Patent 6,122,647), hereafter referred to as "Horowitz

'647", in view of Horowitz (U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz

'987", Mockus ("A Web-Based Approach to Interactive Visualization in Context"),

hereafter referred to as "Mockus", and Wang (U.S. Publication 2002/0023215 A1).

4.     Claims 8-9, 16-17, and 23-24 remain rejected under 35 U.S.C. 103(a) as being

unpatentable over Horowitz (U.S. Patent 6,122,647), hereafter referred to as "Horowitz

'647", in view of Horowitz (U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz

'987", Mockus ("A Web-Based Approach to Interactive Visualization in Context"),

hereafter referred to as "Mockus", and Goodisman (U.S. Publication 2002/0069223 A1).

5.      Claim 10 remains rejected under 35 U.S.C. 103(a) as being unpatentable over

Horowitz (U.S. Patent 6,122,647), hereafter referred to as "Horowitz '647", in view of

Horowitz (U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz '987", Mockus

("A Web-Based Approach to Interactive Visualization in Context"), hereafter referred to

as "Mockus", and Keith (U.S. Publication 2002/0032672 A1).

6.      Claim 18 remains rejected under 35 U.S.C. 103(a) as being unpatentable over

Horowitz (U.S. Patent 6,122,647), hereafter referred to as "Horowitz '647", in view of

Horowitz (U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz '987", Mockus

("A Web-Based Approach to Interactive Visualization in Context"), hereafter referred to

as "Mockus", Wang (U.S. Publication 2002/0023215 A), and Goodisman (U.S.

Publication 2002/0069223 A1).

7.      Claims 1-6, 8-14, 16-18, and 21-24 are pending.  Claims 7, 15, and 19-20 have

been cancelled.  Claims 1, 11, and 21 are independent claims.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8.    Claims 1-3, 11, and 21-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Horowitz (U.S. Patent 6,122,647), hereafter referred to as "Horowitz

'647", in view of Horowitz (U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz

'987", and Mockus ("A Web-Based Approach to Interactive Visualization in Context"),

hereafter referred to as "Mockus".

    **As per claims 1, 11 and 21**, Horowitz '647 discloses a system, article of

manufacture and method for enriching (or annotating with a predefined theme) the

content of a document using personalities that identify enrichment themes with at least

one tag located close to a physical identifier that is associated with a personality (or

theme) in a database of personalities (or themes), and a method including recording

context information, identifying document content using the recorded context

information, enriching the identified document content with the personality, and making

the enriched document content available (See Horowitz '647, Column 5, lines 60-64,

Figure 7, Column 8, lines 38-67, Column 9, lines 1-63, Figure 8, Column 10, lines 8-27

and Column 11, lines 39-40). Horowitz '647 does not disclose expressly including a

personality ID that is associated with the recorded context information recorded by a

reader and used to assign different personality identifiers depending on what time of

year the reader records the personality identifier. Horowitz '647 also does not disclose

expressly an associated personality that defines a set of document service requests

identifying enrichment themes, and recognizing and annotating entities in the identified

document content related to the associated personality, or transmitting from the reader

the identified document content and personality ID to a meta-document server.

Horowitz '987 discloses using a topic ID, recorded with a dynamic content organization

module, which reads the content (See Horowitz '987, Column 10, lines 41-61) into a

database on a computer, and therefore digitally readable, which is associated with a

topic, or personality, in a database of topics, or personalities (See Horowitz '987,

Column 8, lines 36-67, Column 9, lines 1-5, and Column 10, lines 36-41). Horowitz '987

also discloses a supertopic arrangement containing associated subtopics, which can be

used to enrich a document based on the specific supertopic (See Horowitz '987,

Column 11, lines 52-67, and Column 12, lines 1-26), and annotating entities in the

identified document content related to the associated supertopic (See Horowitz '987,

Column 8, lines 52-67 and Column 9, lines 1-29). Horowitz '987 also discloses

transmitting from the dynamic content organization module, or reader, the identified

document content and personality ID to a meta-document server (See Horowitz '987,

Column 10, lines 29-41). Mockus discloses embedding contextual data into an

interactive document. Mockus also discloses that the interactive documents may be

related to data that pertains to particular sporting events, such as NASCAR races,

which are seasonal events. Mockus discloses specifically, by way of example, an

interactive document with embedded data related to a study of truck races included in

the 1999 racing season (See Mockus, Pages 183-184, Sections 5-5.1). As sporting

events such as NASCAR races include numerous individual events occurring at specific

periods of time, it would have been obvious to one of ordinary skill in the art to assign

different personality identifiers, or subtopic ID's, to the document based upon the time of

year, which would include the current status of the NASCAR race season. For

example, a document annotated in the early part of the NASCAR season, such as

February, would contain personality identifiers for the results of races occurring in the

early part of the season only. Continuing with this example, a document annotated in

the later part of the NASCAR season, such as November, would contain personality

identifiers for the final season statistics. The motivation would have been to allow a

user to view annotated data including results for races occurring at different times

during the NASCAR season (See Mockus, Page 184, "Potential User Interactions").

Horowitz '647, Horowitz '987 and Mockus are analogous art because they are from the

same field of endeavor of embedding data into documents. At the time of the invention

it would have been obvious to a person of ordinary skill in the art to include the subtopic

ID and supertopic ID arrangement of Horowitz '987 with the method of Horowitz '647.

The motivation for doing so would have been to determine topic intersections of interest

to the user (See Horowitz '987, Column 11, lines 52-56) At the time of the invention it

would also have been obvious to include the seasonal sporting event data of Mockus

with the system and method of Horowitz '647. The motivation for doing so would have

been to support the highlighting or annotating of a subset of data, such as data specific

to a particular racing season, so that the reader may focus attention on these subsets

when viewing an enriched or annotated document (See Mockus, Page 184, "Potential

User Interactions"). Therefore, it would have been obvious to combine Horowitz '987

and Mockus with Horowitz '647 for the benefit of determining topic intersections of

interest to the user, and for the benefit highlighting or annotating of a subset of data,

such as data specific to a particular racing season, so that the reader may focus

attention on these subsets when viewing an enriched or annotated document, to obtain

the invention as specified in claims 1, 11 and 21.

**As per claim 2**, Horowitz '647, Horowitz '987 and Mockus disclose the limitations

of claim 1 as described above. Horowitz '647 also discloses transmitting the recorded

personality ID and the context information to a meta-document server, where the meta-

document server identifies the document content, associates the identified document

content with the personality ID, and enriches the document content (See Horowitz '647,

Figure 8, Figure 9, and Column 11, lines 24-32).

**As per claim 3**, Horowitz '647, Horowitz '987 and Mockus disclose the limitations

of claim 2 as described above. Horowitz '647 also discloses that the meta-document

server, upon identification of the document content, associates the personality ID with

the identified document content (See Horowitz '647, Figure 8, element 808), that the

meta-document server recognizes, with at least a first method, an entity in the

document content (See Horowitz '647, Column 8, lines 50-61), that the meta-document

server accesses, with at least a second method, a document service using the

recognized entity (See Horowitz '647, Column 9, lines 28-63), that the meta-document

server annotates the identified document content with output from the document service

to define enriched document content (See Horowitz '647, Figure 8, element 810, and

Column 10, lines 22-27), and that the meta-document server makes the enriched

document content available to a set of one or more users (See Horowitz '647, Column

11, lines 39-40).

**As per claim 22**, Horowitz '647, Horowitz '987 and Mockus disclose the

limitations of claim 21 as described above.  Horowitz '647 also discloses transmitting

the recorded topic ID and context information to a meta-document server, where the

meta-document server identifies the document content, associates the identified

document content with the personality ID, and enriches the document content (See

Horowitz '647, Figures 8 and 9), where the meta-document server, upon identification of

the document content, associates the topic ID, personality ID, with identified document

content (See Horowitz '647, Figure 8, element 808), recognizes, with at least a first

method, an entity in the document content (See Horowitz '647, Column 8, lines 50-61),

accesses, with at least a second method, a document service using the recognized

entity (See Horowitz '647, Column 9, lines 28-63), annotates the identified document

content with output from the document service to define enriched document content

(See Horowitz, Figure 8, element 810, and Column 10, lines 22-270, and makes the

enriched document content available to a set of one or more users (See Horowitz,

Column 11, lines 39-40).


9.      Claims 4-6 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Horowitz (U.S. Patent 6,122,647), hereafter referred to as "Horowitz '647", in view

of Horowitz (U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz '987", and

Mockus ("A Web-Based Approach to Interactive Visualization in Context"), hereafter

referred to as "Mockus", as applied to claims 1 and 11 above, and further in view of

Wang (U.S. Publication 2002/0023215 A1).

**As per claims 4-6 and 12-14**, Horowitz '647, Horowitz '987 and Mockus disclose

the limitations of claim 1 as described above.  Horowitz '987 also discloses transmitting

document tokens with the personality ID to the meta-document server  (See Horowitz

'987, Column 9, lines 31-40).  Horowitz '647, Horowitz '987 and Mockus do not disclose

expressly recording the digitally readable ID from an electronic tag with an electronic tag

reader, or from embedded data recorded on a hardcopy document with a scanner.

Wang discloses recording an ID from a printed electronic barcode using a barcode

scanning device (See Wang, Page 12, paragraph 0115).  Horowitz '647, Horowitz '987

Mockus and Wang are analogous art because they are from the same field of endeavor

of recording electronic data.  At the time of the invention it would have been obvious to

include the recording of an ID from a barcode scanning device of Wang with the system

and method of Horowitz '647, Horowitz '987 and Mockus.  The motivation for doing so

would have been to allow the user to conveniently and comfortable perform a

transaction from any location (See Want, Page 2, paragraph 0012).  Therefore, it would

have been obvious to combine Wang with Horowitz '647, Horowitz '987 and Mockus for

the benefit of allowing the user to conveniently and comfortable perform a transaction

from any location to obtain the invention as specified in claims 4-6 and 12-14.


10.     Claims 8-9, 16-17, and 23-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Horowitz (U.S. Patent 6,122,647), hereafter referred to as "Horowitz

'647", in view of Horowitz (U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz

'987", and Mockus ("A Web-Based Approach to Interactive Visualization in Context"),

hereafter referred to as "Mockus", as applied to claims 1, 14 and 17 above, and further

in view of Goodisman (U.S. Publication 2002/0069223 A1).

**As per claims 8-9, 16-17, and 23-24**, Horowitz '647, Horowitz '987 and Mockus

disclose the limitations of claims 1, 11, and 21 as described above.  Horowitz '647,

Horowitz '987 and Mockus do not disclose expressly that the recorded context is one of

position information and time information and where the recorded context information is

one of a timestamp that records when the recording took place and a position ID that

identifies a position of the physical object.  Goodisman discloses including time and

location information in context data (See Goodisman, Page 2, paragraph 0025).

Horowitz '647, Horowitz '987 Mockus and Goodisman are analogous art because they

are from the same field of endeavor of linking hypertext data.  At the time of the

invention it would have been obvious to a person of ordinary skill in the art to include the

time and position information of Goodisman with the context data of Horowitz '647,

Horowitz '987 and Mockus.  The motivation for doing so would have been to present

different information to different users through context filtering (See Goodisman, Page

2, paragraph 0025).  Therefore, it would have been obvious to combine Goodisman with

Horowitz '647, Horowitz '987 and Mockus for the benefit of presenting different

information to different users through context filtering to obtain the invention as specified

in claims 8-9, 16-17, and 23-24.

11.    Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz

(U.S. Patent 6,122,647), hereafter referred to as "Horowitz '647", in view of Horowitz

(U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz '987", and Mockus ("A

Web-Based Approach to Interactive Visualization in Context"), hereafter referred to as

"Mockus", as applied to claim 1 above, and further in view of Keith (U.S. Publication

2002/0032672 A1).

**As per claim 10**, Horowitz '647, Horowitz '987 and Mockus disclose the

limitations of claim 1 as described above.  Horowitz '647, Horowitz '987 and Mockus do

not disclose expressly providing notification that the enriched document is available.

Keith Jr discloses notifying a user regarding updated data (See Keith Jr, Pages 10-11,

paragraph 0092).  Keith Jr, Horowitz '647, Horowitz '987 and Mockus are analogous art

because they are from the same field of endeavor of processing electronic data.  At the

time of the invention it would have been obvious to a person of ordinary skill in the art to

include the user notification of updated data of Keith Jr with the enriched document of

Horowitz '647, Horowitz '987 and Mockus.  The motivation for doing so would have

been to push information to users when desired new information is entered into the

system (See Keith Jr, Page 11, paragraph 0092).  Therefore, it would have been

obvious to combine Keith Jr with Horowitz '647, Horowitz '987 and Mockus for the

benefit of pushing information to users when desired new information is entered into the

system to obtain the invention as specified in claim 10.

12.    Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz

(U.S. Patent 6,122,647), hereafter referred to as "Horowitz '647", in view of Horowitz

(U.S. Patent 6,236,987 B1), hereafter referred to as "Horowitz '987", Mockus ("A Web-

Based Approach to Interactive Visualization in Context"), hereafter referred to as

"Mockus", and Wang (U.S. Publication 2002/0023215 A), as applied to claim 14 above,

and further in view of Goodisman (U.S. Publication 2002/0069223 A1).

**As per claim 18**, Horowitz '647, Horowitz '987, Mockus and Wang disclose the

limitations of claim 14 as described above.  Horowitz '647, Horowitz '987, Mockus and

Wang do not disclose expressly identifying position coordinates where the personality

ID, or topic ID, is recorded.  Goodisman discloses including time and location

information in context data (See Goodisman, Page 2, paragraph 0025).  Horowitz '647,

Horowitz '987, Mockus, Wang and Goodisman are analogous art because they are from

the same field of endeavor of recording electronic data.  At the time of the invention it

would have been obvious to a person of ordinary skill in the art to include the time and

position information of Goodisman with the context data of Horowitz '647, Horowitz '987,

Mockus and Wang.  The motivation for doing so would have been to present different

information to different users through context filtering (See Goodisman, Page 2,

paragraph 0025).  Therefore, it would have been obvious to combine Goodisman with

Horowitz '647, Horowitz '987, Mockus and Wang for the benefit of presenting different

information to different users through context filtering to obtain the invention as specified

in claim 18.

### Response to Arguments

13.     Applicant's arguments filed 8 November 2005 have been fully considered but they are not persuasive.

Mockus teaches a system and method of using a set of infoVis components that can be placed and linked within a standard HTML document, initialized to focus on key analysis results, and directly manipulated by readers to explore and analyze data further (See Mockus, Page 181, Abstract).   Horowitz '987 teaches recording various personality identifiers arranged as topic ID's and supertopic ID's (See Horowitz '987, Column 10, lines 29-41).  Horowitz '987 also teaches that the personality identifiers are arranged as subtopic ID's and supertopic ID's in response to user input of a desired type of topic arrangement or automatically (See Horowitz '987, Column 10, lines 32-36).  Additionally, Mockus teaches that components may be added to documents based upon seasonal events, such as NASCAR races (See Mockus, Pages 183-184, Sections 5-5.1).  As sporting events such as NASCAR races include numerous individual events occurring at specific periods of time, it would have been obvious to one of ordinary skill in the art to assign different personality identifiers, or subtopic ID's, to the document based upon the time of year, which would include the current status of the NASCAR race season.  For example, a document annotated in the early part of the NASCAR season, such as February, would contain personality identifiers for the results of races occurring in the early part of the season only.  Continuing with this example, a

document annotated in the later part of the NASCAR season, such as November, would

contain personality identifiers for the final season statistics. The motivation would have

been to allow a user to view annotated data including results for races occurring at

different times during the NASCAR season (See Mockus, Page 184, "Potential User

Interactions").

*Conclusion*

14.    **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

15.     Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136.

16.     Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LR

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